Under the Paperwork Reduction Act of 1995, no persons are	required to respon	no to a collection o	i intormation unless it t	rispiays a valid Olvib Control I	number.		
UTILITY		ocket No.	501.43402X00				
PATENT APPLICATION First Inve		or	SATO, HAJIME	AJIME			
TRANSMITTAL			DISK ARRAY DEVICE HAVING SPARE DISK				
HOMOMITAL			DRIVE AND DATA SPARING METHOD				
(Only for new nonprovisional applications under 37 CFR 1.53(b))	Express Ma	ail Label No.					
APPLICATION ELEMENTS SEE MPEP chapter 600 concerning utility patent application	Mall Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450						
Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Applicant claims small entity status.		Com 8. Nucleotide	ROM or CD-R in duplic puter Program (Appen and/or Amino Acid Sec	dix)	10/767		
See 37 CFR 1.27.		a. Computer Readable Form (CRF)					
3. Specification [Total Pages: 44] (preferred arrangement set forth below)		 b. Specification Sequence Listing on: i.					
-Descriptive title of the invention -Cross Reference to Related Applications			🗆 рарег		-		
-Statement Regarding Fed sponsored R & D -Reference to sequence listing, a table,	c. Statements verifying identity of above copies						
or a computer-program listing appendix -Background of the Invention		AC	COMPANYING AF	PPLICATION PARTS			
 Brief Summary of the Invention Brief Description of the Drawings (if filed) 		Assignment Papers (cover sheet & documents(s))					
-Detailed Description -Claim(s)			FR 3.73(b) Statement en there is an assignee	· · · · · · · · · · · · · · · · · · ·			
-Abstract of the Disclosure		·	ish Translation Docum				
4. Drawing(s) (35 U.S.C. 113) [Total Sheets: 13]			mation Disclosure	Copies of IDS Citat	tions		
5. Oath or Declaration [Total Sheets:	<u>_</u>]	Statement (IDS)/PTO-1449 13. Preliminary Amendment					
a Newly executed (original or copy) b Copy from a prior application (37 CFR 1.63 (d))		14. Return Receipt Postcard (MPEP 503)					
(for continuation/divisional with Box 18 completed)		(Should be specifically itemized)					
i. DELETION OF INVENTOR(S)		15. Certified Copy of Priority Document(s) (if foreign priority is claimed)					
Signed statement attached deleting inventor(s) Named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)	16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35						
		C-3	s equivalent. er: Figs. 1-13. Cred	it Card Payment Form,	Claim		
6. Application Data Sheet. See 37 CFR 1.76		For Priority	etter				
18. If a CONTINUING APPLICATION, check appropriate or in an Application Data Sheet under 37 CFR 1.76:	box, and supp	ly the requisite i	nformation below ar	nd in a preliminary amend	dment,		
Prior application information: Examiner: Art Uni							
For CONTINUATION OR DIVISIONAL APPS only: The entire of Box 5b, is considered a part of the disclosure of the accompa	isclosure of the	prior application,	from which an oath o	or declaration is supplied un by incorporated by referen	nder ice.		
The incorporation can only be relied upon when a portion has	been inadverter	ntly omitted from	the submitted applica	ition parts.			
19.	CORRESPONDE	NCE ADDRESS					
Customer Number 020457			or [Correspondence address	below		
Name ANTONELLI, TERRY, STOUT 8	ANTONELLI, TERRY, STOUT & KRAUS, LLP						
Address							
City	State		Zip Co	ode			
Country	Telephone	(703) 312-6600	Fax				
Name (Print/Type) Carl I. Brundidge Registration No. (Attorney/Agent) 29,621							
Signature			Dat	e January 30, 2004			

This collection of information is equired by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete. including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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TEE TO A NORMITTAL		Complete if Known					
FEE TRANSMITTAL		Application Number		mber			
50 FON TV 2004		Filing Date			January 30, 2004		
for FY 2004		First Named Inventor		ventor	SATO, HAJIME		
h h		Examiner Name					
Effective 10/01/2003. Patent fees are subject to annual revision.							
☐ Applicant claims small entity status. See 37 CFR 1.27		Art Unit					
TOTAL AMOUNT OF PAYMENT (\$) 770.00		Attorney Docket No. 501.43402X00					
METHOD OF PAYMENT (check all that apply)		FEE CALCULATION (continued)					
☐ Check ☑ Credit Card ☐ Money ☐ Other ☐ None Order	3. A	DDITIO	ONAL F	EES			
☑ Deposit Account:							
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Account 01-2135	Large	e Entity	Small E	illity		Fee Paid	
Deposit	Fee	Fee	Fee	Fee	Fac Decementary		
Account Name Antonelli, Terry, Stout & Kraus, LLP	1051	9 (\$) 130	Code 2051	(\$) 65 S	Fee Description surcharge – late filing fee or oath		
The Director is authorized to: (check all that apply)	1052	50	2052	25 S	surcharge - late provisional filing fee or		
☐ Charge fee(s) indicated below ☐ Credit any overpayments					over sheet		
□ Charge any additional fee(s) during the pendency of this application.	1053		1053		lon-English specification		
	1812		1812		or filing a request for ex parte reexamination		
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1804	920*	1804		Requesting publication of SIR prior to examination action		
FEE CALCULATION	1805	1,8401	1805		Requesting publication of SIR after examiner action		
1. BASIC FILING FEE	1251	110	2251		extension for reply within first month		
Large Entity Small Entity Fee Fee Fee Fee Fee Description Fee Paid	1252	420	2252		xtension for reply within second month		
Code (\$) Code (\$)	1253	950	2253		xtension for reply within third month		
1001 770 2001 385 Utility filing fee 770.00 1002 340 2002 170 Design filing fee	1254	1,480	2254	740 E	xtension for reply within fourth month		
1002 540 2002 170 Besign ming lee	1255	2,010	2255	1,0 0 5 E	xtension for reply within fifth month		
1004 770 2004 385 Reissue filing fee	1401	330	2401	165 N	lotice of Appeal		
1005 160 2005 80 Provisional filing fee	1402	330	2402	165 F	iling a brief in support of an appeal		
	1403	290	2403	145 R	Request for oral hearing		
SUBTOTAL (1) 770.00	1451	1,510	1451	1,510 P	etition to institute a public use proceeding		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1452	110	2452		Petition to revive – unavoidable		
Fee from	1453	1,330	2453	665 P	Petition to revive – unintentional		
Extra Claims below Fee Paid	1501	1,330	2501	665 L	Itility issue fee (or reissue)		
Total Claims 20 -20** = 0 x 18 = 0	1502	480	2502	240 C	Design issue fee		
Indep. $3 -3^{**} = 0 \times 86 = 0$	1503		2503		Plant issue fee		
Claims	1406	130	1460		etitions to the Commissioner		
Multiple Dependent 290 = 0	1807		1807		Processing fee under 37 CFR 1.17(q)		
Large Entity Small Entity Fee Fee Fee Fee Fee Fee Fee Description	1806	180	1806		Submission of Information Disclosure Stmt		
Code (\$) Code (\$)	8021	40	8021		Recording each patent assignment per property (times number of properties)		
1202 18 2202 9 Claims in excess of 20	1809	770	2809		iling a submission after final rejection		
1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claim, if not paid				(;	37 CFR § 1.129(a))		
1204 86 2204 43 ** Reissue independent claims	1810	770	2810		or each additional invention to be examined (37 CFR § 1.129(b))		
over original patent 1205 18 2205 9 ** Reissue claims in excess of 20	1801	770	2801		Request for Continued Examination (RCE)		

SUBMITTED BY			Complete (if applicable)					
Name (Print/Type)	Carl I. Brundldge	Registration No. (Attorney/Agent)	29,621	Telephone	703-312-6600			
Signature	2			Date	01/30/2004			

1802 900

Other fee (specify)

1802

Reduced by Basic Filing Fee Paid

900 Request for expedited examination of a design application

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and over original patent

SUBTOTAL (2) \$ 0.00

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